

Amendment Under 37 CFR 1.111  
USSN 10/069,017

**AMENDMENTS TO THE CLAIMS**

**Please cancel claims 1-12 without prejudice or disclaimer, and add the following new claims. The listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

Claims 1-12 (Cancelled)

13. (New) A submarine fiber optic transmission network including :
- a single submarine cable having a first end and a second end and provided with at least two pairs of optical fibers,
  - a first branching unit connected, on the one hand, to said first end of said submarine cable and, on the other hand, to a first submarine landing terminal equipment through a first cable section provided with at least two pairs of optical fibers, and to a second submarine landing terminal equipment through a second cable section provided with at least two pairs of optical fibers,
  - a third submarine landing terminal equipment connected to said second end of the single submarine cable,
  - said branching unit providing protection mechanism by enabling switching of the fiber pairs of the single submarine cable to the fiber pairs of one of the two cable sections connected to the said branching unit.

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14. (New) The network of claim 13, wherein the first and the second submarine landing terminal equipments are both connected by a respective one fiber pair to a first terrestrial multiplexer.

15. (New) The network of claim 14, wherein the first terrestrial multiplexer has four tributaries.

16. (New) The network of claim 14, wherein the first terrestrial multiplexer is a synchronous digital hierarchy add and drop multiplexer.

17. (New) The network of claim 14, wherein a second terrestrial multiplexer is connected, on one side, by one fiber to the first submarine landing terminal equipment and by another fiber to the second submarine landing terminal equipment and, on the other side, by a further fiber to a tributary of the first terrestrial multiplexer.

18. (New) The network of claim 17, wherein the second terrestrial multiplexer is a synchronous digital hierarchy add and drop multiplexer.

19. (New) The network of claim 17, wherein, at the first end of the single submarine cable, a third terrestrial multiplexer is connected by one fiber to another submarine landing terminal equipment of a cable section, by another fiber to a submarine landing terminal

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equipment of the other cable section and by a further fiber to another tributary of said first terrestrial multiplexer.

20. (New) The network of claim 19, wherein the third terrestrial multiplexer is a synchronous digital hierarchy add and drop multiplexer.

21. (New) A transmission method for use in a network according to claim 14, including, at one end of the single submarine cable:

sending fast recovery traffic from a tributary of a first terrestrial multiplexer through a submarine landing terminal equipment, a cable section and a branching unit to the single submarine cable, and

receiving fast recovery traffic on a tributary of the first terrestrial multiplexer from the single submarine cable through the branching unit, the other cable section and a submarine landing terminal equipment.

22. (New) The method of claim 21, including, at one end of the single submarine cable:

sending slow recovery traffic from a tributary of a second terrestrial multiplexer through the first terrestrial multiplexer, a submarine landing terminal equipment, a cable section and a branching unit to the single submarine cable, and

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receiving slow recovery traffic on a tributary of the third terrestrial multiplexer from the single submarine cable through said branching unit, another cable section, a submarine landing terminal equipment and said first terrestrial multiplexer.

23. (New) The method of claim 21, including, in the event of an incident, at one end of the single submarine cable:

sending fast recovery traffic from a tributary of said first terrestrial multiplexer through a submarine landing terminal equipment, a cable section and a branching unit to the single submarine cable, and

receiving fast recovery traffic on a tributary of said first terrestrial multiplexer from the single submarine cable through the branching unit, the same cable section and the same submarine landing terminal equipment.

24. (New) The method of claim 21, including, in the event of an incident, at one end of the single submarine cable:

sending slow recovery traffic from a tributary of a second terrestrial multiplexer through a submarine landing terminal equipment, a cable section and a branching unit to the single submarine cable, and

receiving slow recovery traffic on a tributary of a third terrestrial multiplexer from the single submarine cable through the branching unit, the same cable section and the same submarine landing terminal equipment.

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25. (New) The network of claim 13, wherein said third submarine landing terminal equipment is connected to said second end of said submarine cable via a second branching unit through a third cable section provided with a last two pairs of fibers, said second branching unit further connecting said second end of said submarine cable to a fourth submarine landing terminal equipment via a fourth cable section having at least two pairs of optical fibers.

26. (New) The method of claim 21, wherein said third submarine landing terminal equipment is connected to said second end of said submarine cable via a second branching unit through a third cable section provided with a last two pairs of fibers, said second branching unit further connecting said second end of said submarine cable to a fourth submarine landing terminal equipment via a fourth cable section having at least two pairs of optical fibers.